

# UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NO.		FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/673,934	09/30/2003		Volkert A. Zeijlemaker	P10500.00	1632	
27581	7590	07/11/2006		EXAMINER		
MEDTRO				ALTER, A	ALTER, ALYSSA M	
710 MEDTRONIC PARK MINNEAPOLIS, MN 55432-9924				ART UNIT	PAPER NUMBER	
				3762		
				DATE MAILED: 07/11/2006		

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)					
Office Action Summer.	10/673,934	ZEIJLEMAKER ET AL.					
Office Action Summary	Examiner	Art Unit					
	Alyssa M. Alter	3762					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 16(a). In no event, however, may a reply be tim rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	I. the mailing date of this communication. (35 U.S.C. § 133).					
Status							
1) Responsive to communication(s) filed on 23 Ma	arch 2004.						
	<u> </u>						
, <u> </u>	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under E	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims							
4)⊠ Claim(s) <u>1-37</u> is/are pending in the application.							
4a) Of the above claim(s) is/are withdrawn from consideration.							
5) Claim(s) is/are allowed.							
6)⊠ Claim(s) <u>1-37</u> is/are rejected.	☑ Claim(s) <u>1-37</u> is/are rejected.						
7) Claim(s) is/are objected to.	Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	election requirement.						
Application Papers							
9) The specification is objected to by the Examine	r.						
10)⊠ The drawing(s) filed on <u>30 September 2003</u> is/are: a)⊠ accepted or b)☐ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority under 35 U.S.C. § 119							
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>							
Attachment(s)							
Notice of References Cited (PTO-892)     Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) 🔲 Interview Summary Paper No(s)/Mail Da						
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date		eatent Application (PTO-152)					

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#### **DETAILED ACTION**

### Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 7 and 19 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The examiner is unsure what the Applicant is referring to in claims 7 and 19 as a "packet size".

#### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 1. Claims 1-27, 29-32 and 34-37 are rejected under 35 U.S.C. 102(e) as being anticipated by Weisner et al. (US Patent Publication 20030167078 A1). Weisner et al. discloses a magnetic control system for selectively enabling/disabling an implantable device's operation. The present invention utilizes "an interlocking magnetic device, e.g., an electromagnet, that generates a string of magnetic pulses to evoke (or suppress) a response in the implantable device. By distinguishing the amplitude/duration/sequence

of magnetic pulses, implanted devices can be selectively activated or deactivated"(page 1, paragraph 3).

As to claims 1-2, 9-10, 12-14, 21-23, 34-35, the telemetry is adjusted when there are magnetic fields from an MRI device. "Sensor 186 can, in conjunction with controller circuitry 106, detect the application and removal of magnetic fields, e.g., as a defined sequence of magnetic pulses" (page 11, paragraph 74).

As to claim 3-4, 11-12, 15-16, 24, since the implanted devices can be selectively activated or deactivated by magnetic pulses of different amplitude/duration/sequence of magnetic pulses, the duration and interval between the pulses is necessarily sensed.

As to claims 6 and 18, "the net result is that the differential output voltage ( $V_B$ - $V_A$ ) increases in an essentially linear manner following the intensity of the applied magnetic field (see FIG. 10). In a conventional magnetoresistive device, the differential output voltage increases dependent upon the applied magnetic field strength (i.e., dependent upon the size of an external magnet and its distance from the magnetoresistive sensor) but independent of the applied polarity (N or S) of the external magnet" (page 6-7, paragraph 51).

As to claims 7 and 19, the examiner considers "packet size" to be the different amplitude/duration/sequence of magnetic pulses that can selectively activated or deactivated the implantable medical devices.

As to claim 8, since the implantable medical device sensed electromagnetic information, it necessarily sensed "information associated with one or more MRI magnetic gradients".

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As to claims 36-37, as discloses by Weisner et al. on page 9, step 2 Select Mode, the "implantable device 100 responds and sets the MRI mode to allow the patient to spend time in a MRI machine".

As to claims 25-27 and 30-32, since the implantable device 100 can sense and respond to the MRI electromagnetic radiation bursts from an MRI device with the controller circuitry 106 as seen in figures 3A-3B, the examiner considers the implantable device to function as an implantable device and as a programmer.

As to claim 29, as depicted in figure 1, the system further includes an additional programmer, the clinician's programmer 172, which the examiner considers to be the third device, which can communicate with the implantable device.

## Claim Rejections – 35 USC § 103

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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1. Claims 28 and 33 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Weisner et al. (US Patent Publication 20030167078 A1). Weisner et al. discloses an implantable device 100 that can sense and respond to the MRI electromagnetic radiation bursts from an MRI device with the controller circuitry 106 as seen in figures 3A-3B, the examiner considers the implantable device to function as an implantable device and as a programmer. Therefore the implantable device is both an implantable device and a controller.

In the alternative, Weisner et al. discloses the claimed invention except for two separate devices for the programmer and the implantable medical device. It would have been obvious to one having ordinary skill in the art at the time the invention was made to separate the unified device, since it has been held that constructing a formerly integral structure in various elements involves only routine skill in the art. *Nerwin v. Erlicnman, 168 USPQ 177, 179.* (see MPEP 2144.04). Furthermore, such a modification would reduce the components and simplify the replacement.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alyssa M. Alter whose telephone number is (571) 272-4939. The examiner can normally be reached on M-F 9am to 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Sykes can be reached on (571) 272-4955. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <a href="http://pair-direct.uspto.gov">http://pair-direct.uspto.gov</a>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Alyssa M Alter
Examiner
Art Unit 3762

Jeffrey R. Jastrzab Primary Examiner Art Unit 3762